1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

ingly. Each man took only one horse, rode it to the salt beds, loaded it, and walked home. Each pilgrim must keep his horse fresh for the trip. If he had none, he might borrow, and no one would dare refuse. The compensation to the horse's owner was half a load of salt, or one saddlebagfull. The saddlebags taken were the ancient netted receptacles of maguey fiber. Inside these the salt was wrapped in handwoven cotton sheets or, in old days, fiber mats. Each pilgrim must make ropes of hair or of maguey fiber, for a bridle and for hobbling his horse. He wore, in the old days, only breech cloth and sandals. At his waist he carried two canteens, made of gourds, covered with rabbit skin, and slung in a grass net. He also carried a pouch of parched corn meal and the small watertight basket which was his only utensil for eating and drinking. Beside the corn meal, "ripe men" might carry as much dried squash, tortillas, or any other food as they could manage.

For all equipment there was a special vocabulary, analogous to that used on the warpath. The horse was called the partner; the gourd, the jar; the basket, the dish; pinole, gruel; hay, weeds; salt, corn. For other common terms there were words showing a similar slight variation. These words the neophyte must learn and not misuse, under pain of accident on the journey.

Each village took prayer sticks in some form, to be offered to the ocean. The following list will show the variety introduced under the general heading prayer-stick offering:

Komarik: prayer sticks with two turkey or eagle feathers. Left at each camping place, and one thrown by each man into the sea.

Pisinimo: eagle down; no sticks. Each man brings his own down and throws it into the sea.

Anegam and Santa Rosa: peeled white sticks of western willow; no feathers. Carried by leader. One placed at every camp, and one given each man to throw in the sea.

Akchin: sticks with turkey or eagle feathers carried by leader, placed at each camp along the way and given men to carry into the sea and to bring back again. One large stick, with streamer of red cloth, planted on the beach.

San Miguel: strips of red cloth thrown into ocean.

1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

shaman began to think about his pay and some introduced hints into their songs. One is reported to have sung:

Don't give me beads,
I am not young and handsome.
Give me a horse; a horse!

A horse or cow was the usual pay, and the family generally brought in a piece of manure to indicate what it would be. If diagnosis were difficult, the shaman might have to sing on other nights (four was the ritual number) before he earned his pay. Usually before dawn he announced what curing singer must be sent for, or else he himself sucked out the disease object. Some shamans did not suck, "because they did not have it in their dreams." They merely recommended that another shaman be called.

If the specialists he had recommended produced no result, a shaman would diagnose again, without further pay. He might thus recommend several curing singers in succession, and if all failed, the blame was not theirs, but his. That such happenings were not infrequent is evidenced by the Papago slang term for shaman, which is "liar."

THE FEMALE SHAMAN

The myths occasionally mention a female shaman who was powerful and whose magic succeeded where that of her male colleagues had failed. In practice, the writer heard of but few female shamans, and these held a very subordinate position. Denied any connection with shamanism until after childbearing age, women often became herbalists [6] and then drifted into a limited shamanism by means of a vision or two. As with white women doctors, circumstances often pushed them into specializing in children's diseases.

One woman known to the writer practiced a peculiar form of therapy which might have seemed her own idiosyncrasy had it not turned out to be an ancient Aztec practice.[7] This was pressing on

[6] See p. 30. [i.e., read p. 300.—Ed.] [7] Sahagún, Seler, p. 366.

6: Densmore
192 ●

NU28 Papago NU28

[For the Papago lyrics to their songs, usually given with English translation and occasionally accompanied by a note on linguistic usage, see also category 533.]

9: O'Neale & Dolores E, I-4 (no date) 1943
NU28 Papago NU28

some justification. To the Papago three hues seem less attractive than others: greasy color (*muhata'*KI), smoky color (*kupi'icuh*VI), and muddy color (*pi'ie'-ma'*KI). However, even this reaction may have little to do with the actual colors. If these three hues develop in the firing of pottery, they are indicative of unsuccessful results. It is probable that the distaste for greasy, smoky and muddy colors is based as much upon the partial failure of the women's efforts as upon the colors themselves. In appearance they are dull, and in some of their dark values they are similar enough to make identification difficult.

Several descriptive words suggesting colors are not included in the compiled list although they are used by some Papago who have a more extensive vocabulary than others. In ordinary conversation use of such descriptive words is recognised as figurative rather than literal. Obviously, there is no such color as sour color, although the first horse owned by Dolores was named *se'e'*KE*'icuh*, the Sour One, by his father. To interpret the Indian phrase one must understand that the horse's color was like the color of *ipahi* fruit before it turns red, a hue similar to one of the several grays which the Papago call *siceta'*KI, green. This color suggested to Dolores' father the sourness of the unripe fruit, hence the name.

The parts of the body which are always covered are lighter than the exposed portions, a difference which is no less noticeable among Indians than among peoples with white skins. This lighter portion of the body is said to be *smahcewa'*KE from the verb *smahs*, to be in sight or visible; to be seen.

Two other descriptive words are related to color designations although the words in themselves imply no specific colors. One is *seicelsewe'*KI. This word seems to have no synonym in English. Perhaps dappled contains a similar meaning. The word describes the appearance given to a surface by markings of color. A rattlesnake is *seicelcewe'*KI, because of the combination of its diamond markings and spotted coloring. A mountain turtle is likewise *seicelcewe'*KI There is obviously some connection between *seicelcewe'*KI and *seicelce'*KI which means full of holes or open spaces (a word applied, also, to a country without trees). *seicelcewe'*KI like *valiksah* (the Papago rendition of a Spanish word) might grammatically be used with any color except for the fact that there are very few instances when its use is appropriate. Black and red are used with *seicelcewe'*KI, but other combinations seem foolish to the Papago.

Another descriptive word is *sipanima'*KI. Cloth with an allover repetition of small design units is described as dotted, or spotted. The Papago word comes from *sipani*, falling in drops like a liquid. *sipanima'*KI suggests the appearance of dusty ground after a very light shower. No color is implied, hence one must be added to make the description complete, as *swe'pe'kime sipanima'*KE, red spotted, or *sicu'kema sipanima'*KE, black spotted, etc.

Dolores' list of color designations contains about three dozen names counting the neutrals: blacks, whites, and the grays. The identification of specific

9: O'Neale & Dolores E, 1-4 (no date) 1943
NU28 Papago NU28

colors with their familiar names was facilitated by the use of colored papers.[1] Translations of most of the native words require the qualifying adverbs "almost" or "very", or the phrase "very much." The Papago prefixes *cah-* and *sih-* indicate a relationship between the hue determined upon to represent the color designation and similar colors which are compared to it. Theoretically, these latter belong to the same color group, i.e., they warrant the use of the same color designation. Judging from the evidence gathered, there is no implied differentiation in the term "almost" between a degree of relationship based upon value and one based upon purity. For example, *oam* is yellow, and *cahsoam* is almost yellow, but whether the latter is almost as dark as the color determined upon as *oam*, or almost as full strength (pure) as *oam*, is neither implied by the adverb, nor shown by the several colored papers chosen to identify the tints to which *cahsoam* was applicable (chart 1). Some of these tints were almost pure light yellows, and some were dull light yellows. They were all, however, high on the value scale. By contrast with commercial dyes natural dyes are usually more or less grayed or dull, yet there are appreciable differences in brightness among them.

But although the word *cahsoam* may be applied to any one of several light tints of yellow, pure or dull, *sihsoam*, very yellow, indicates more definitely a relationship involving brightness or purity of color as well as value. The choices of colored papers identifying "very" yellow, "very" green, etc., proved this. Dolores' remembered reactions connected with the first purchased dress materials to appear on the Reservation are additional evidence.

Really bright colors were unknown among the Papago. Color mixtures are still used just as made, without attempts to modify by blending two or more together. It is true some colors do change while undergoing various treatments, as for example, the yellow of buckskin, which may become reddish during the tanning processes, but the change is due to the condition of the materials used rather than to intentions. The dyes and paints used by the women basket makers and potters are few in number and without strong contrasts. Even accidental color arrangements can hardly escape being harmonious. Pottery has black, or black and red patterns, on natural buff-colored clay. The question of which colors should be used or where they should be distributed could never have been very insistent.

The first European costumes to be adopted by the Papago women seem to have been conservative. They had full skirts with ruffles at the lower edges, usually made of light or white materials with small designs (calicoes). The Pima and the Mohave women dressed differently. The Pima at first bought yardage to wind around their waists sarong-fashion. Later they, too, made full skirts. The materials they bought were dyed in crude colors, and the

[1] Milton Bradley's *Studio Book of Colored Papers* (Springfield, Massachusetts). Each of the 18 hues appears in five value steps: two tints, middle value, and two shades. Since many of the Bradley papers are too bright, it was necessary to find some examples among duller papers.

9: O'Neale & Dolores E, I-4 (no date) 1943
NU28 Papago NU28

women's inexperience in combining them showed in the garish inharmonies. Their dresses were riots of violent contrasts. Bright red, green, and yellow skirts banded at the bottom with other colors equally bright served to identify the wearers as far away as they could be seen. The Papago were astonished at the quantities of strong colors used. Bright colors warrant the use of the adverb "very" in describing them. In such cases the prefix *sih-* means not the darkness or lightness of the color, but its purity.

Certain color names can be modified to indicate that the color is very dark. Since the modifier is formed of the Papago word for black (*ʻicuʻ*KE), the translations of *sicuʻkema sewe*ʻKI and *sicuʻkema siceta*ʻKI, *sicuʻkema spiʻtema*ʻKI, and *sicuʻkema smuhata*ʻKI are equivalent to blackish red, blackish green, blackish muddy color, and blackish greasy color.[3] Obviously a modifier meaning blackish cannot be used with the remaining color designations on the list, whites, blacks, and grays, or with yellows which become browns upon darkening, or with *ipahi* color which is never dark.

Conventional uses of specific colors on objects in the everyday life of the Papago are almost totally lacking. Red and black are the "right" colors for the painted designs on the feathers and shafts of arrows, but the basketry and pottery seem not to offer analogous examples. There is, however, one occasion upon which four specific colors are required, and upon which they have special significance. These four colors, symbolizing the directions, differentiate the rain clouds in the Papago Rain ceremony:

NORTH: *skokemaʻ*KI *icevaʻ*KI
gray clouds

WEST: *sweʻpeʻ*KI *icevaʻ*KI
red clouds

EAST: *siotah icevaʻ*KI
white clouds

SOUTH: *spitemaʻ*KI *icevaʻ*KI
muddy clouds

The color names for the clouds in the east and west need no explanation. The names for the southern and northern clouds derive from the Papago origin story. At the time of the flood, the rubbish that was carried along stopped in the south (*Vaʻkolih*WE). The flood waters went down in the north (*icupin*,

[3] Certain differences in the spellings of the same word should be noted. In the main, the orthography and spellings correspond to those followed in two earlier papers by Dolores: *Papago Verb Stems* (University of California, Publications in American Archaeology and Ethnology 10, 1913), pp. 241–263; and *Papago Nominal Stems* (Sapir Series 20, 1923), pp. 19–31. Throughout the present notes green sometimes appears as *iceʻa*ʻKI, at other times as *siceʻa*ʻKI, red as *weʻ*KI and *sweʻ*KI etc. The initial *s* is a formative element; the stem can be used with or without it.

Mountains and places with permanent names taken from colors use the stem without the *s*. East of Tucson is Little Yellow mountain, *ali oam toʻoʻ*KE, a name merited by its appearance in the good years when poppies cover the slopes. Likewise Green mountain is *iceʻa*ʻKI *toʻoʻ*KE and Green Well is *iceʻ*KI *vahyuk*.

9: O'Neale & Dolores E, I-4 (no date) 1943
NU28 Papago NU28

ipahi color (corresponds to our purple-red). *cahsipaima'*KI, almost *ipahi* color; *ipaima'*KI, *ipahi* color; *sihsipaima'*KI, very much *ipahi* color. *ipahi* is the name of the prickly pear plant, as well as of its fruit. *mah* is the verb to give. The combination means to give the color of the fruit to something. *ipahi* is similar to dark cerise or crimson.

The juice of the *ipahi* fruit, which appears somewhat lighter when dry, is one of the most easily obtained paints for coloring the feathers on arrows. In addition to its availability, the juice can be used just as found.

Color designations of Spanish origin used by the Papago.— The group of color terms in this section are generally applied to the animals which were brought in by the Conquerors. Determining clear meanings for these adopted words has not been a simple matter, nor can the authors be certain that they always have had the same ideas in mind. Comparable difficulties are encountered in attempts to differentiate the characteristic appearance of surfaces to which the English words flecked, pied, mottled, splotched, or dappled are applicable.

Some of the Papago-Spanish equivalents are obvious.[4] It is essential to recognize that *l* and *r* are frequently confused, and that *b* and *v* are interchangeable, especially in phonetic spellings.

The following compilation of terms includes those in common usage among the Papago:

alihcani, sorrel. (Sp., *alazan*, sorrel-colored.) Applied to horses.

koniloh, roan. (Sp., *acanelado*, cinnamon-colored. If the unaccented initial vowel and the intervocalic *d* are dropped, the equivalence seems clear.) Applied to horses.

lihsintoh. (Sp., *retintado* (?), retinted.) If two colors are evident, but one of them has the appearance of having been painted over the other, the effect is called *lihsintoh*. Applied to horses. When the color spots have more distinct outlines, the designation *pintoh* describes the effect.

pintoh. (Sp., *pintado*, painted, spotted, mottled.) To the Papago, this word means two colors, but it is necessary to mention which two, since no indication is contained in the word itself.

savinoh. (Sp., *sabino*, a mixed white and chestnut color. Applied to horses and mules.) The Papago apply this term to a dappled buckskin horse.

su'kelahtoh, one of the browns. (Sp., *chocolate*.) Applied to dogs.

valihsah. (Sp., *barcino* (?), ruddy, approaching redness. A word regularly applied to cows, bulls, dogs, etc.) As the Papago apply this word to cows it does not mean a single color, but a mixture of colors which produces a spotty effect. *valihsah* is always used in combination with some color name indicating that that color predominates, or is most noticeable. *valihsah* is similar to our mottled, a word which in itself only describes an appearance, and one which requires a phrase "with green," "with

[4] The authors are indebted to Professor Beatrice Cornish of the Spanish Department, University of California, for helpful suggestions and aid in checking possible Spanish equivalents for Papago color terms.

9: O'Neale & Dolores E, I-4 (no date) 1943
NU28 Papago NU28

blue," etc., to clarify the meaning. *saliksak* can be used with black (*sicu'hema svaliksaṣa'*KE), with yellow (*soomak sva'iksaṣa'*KE), and with red (*swe'himak svaliksaṣa'*KE), to describe a mixed color effect. Other grammatically possible combinations would seem senseless to the Papago as, for instance, a mixed color effect in which white predominated, (*stohama svaliksaṣa'*KE). Such a combination probably would be called gray (*skoma'*KI).

sayok. (Sp., *albino* (?).) This name is given to different colors, some of them almost white. Applied to horses.

wuilok. (Sp., *albino* (?).) Applied to horses that are white. If the Papago word is from the Spanish albino, it may refer to the color of the eyes. Some very white horses have peculiar eyes. When an Indian has trouble with his eyes, he is sometimes joked about their appearance. No Indian could be the same color as the horses to which *wuilok* applies, but no matter how dark his skin, his eye trouble makes him *wuilok*.

To sum up: Papago color designations indicate a limited need for color terminology in their everyday life. They seem to reveal, in addition, a rather obvious lack of what has been called nature appreciation in terms of color. A few of the examples cited to aid in the identification of a color designation were chosen from natural phenomena, but the fact that the majority of words apply to the color of horses and cows suggests the comparatively late development of color consciousness. Dolores believes that growth in this direction is the result of education and the increased availability of colored objects and materials.

There are several descriptive color names on the Papago list. It includes ashen, muddy, smoky, and greasy colors, but no combination equivalent to leaf or grass green, *ipaki* red, sky gray, or poppy yellow. Our word green, for example, covers hundreds of inter-gradations. These require for their identification not only modifiers like olive green or mustard green to show the preponderance of the blue or yellow hue constituents, but also various other modifiers which by analogy indicate relative degrees of value and purity. Parrot green, lettuce green, emerald, bottle, sea, oasis are typical examples of designations inspired by professional stylists. The more simple the system of color terminology, the greater the necessity that each designation be adequate to cover a range of differences in value and purity and that the term be sufficiently flexible to permit extensions of meaning.

The Papago recognise light colors in the formation of their designations by prefixing *cak-* meaning a little like, or almost. They also use a modifier to indicate the dark or blackish colors, and although they have no separate term connoting the brightness, purity, or intensity of a color, their prefix *sik-* in most instances identifies a hue as nearly pure. The majority of the Papago color designations, however, emphasize the value or light-to-dark variations.

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10: Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

NOMINAL STEMS

BY

JUAN DOLORES

●192
825

ANIMALS

a'ahto, peacock
ahṭo, sing
*o'ocoht, tigers
ohkohkoi, wild pigeon
u'uhi'k, birds
uhimali, a kind of bug
*maibo'ki, centipede
mavi't, panther, lion
muvali, mu·varum, fly
mu·ra, mule, *mula*
*nan·ahkamal, bat
nahkɐceli, nahkcerem, scorpion
neboht, whippoorwill
nyuvi, buzzard
*sihki, white-tailed deer (?)
*s·uam-muaram, butterfly
*caeani, blackbirds
coi'ka, pet animal
*co'o, grasshopper
culikɐ, ground squirrel
cu·'k, mocking bird
haivani, cow
*hauhpali, a kind of hawk
*hiohpɐtci, louse
hiwehtcu, belly
hiwehtcuwe'ki, small black and red spider, poisonous
hikivitci, woodpecker
*hohohkimali, butterfly
huavi, deer
huh'u'ṭaki, bumble bee
*va·ma't, any non-poisonous snake
vahpɐkya'i'k, ducks
vahtohp, fish
visa'kɐ, hawk
vihpc, vi·hpɐcum, wasps, hornets
vipisemali, humming bird
wopco, rats

10:Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

192
825

ʉu·lu·, donkey, *burro*
ba'a'k, eagle
ban, coyote
baba't, frog
*pihsin, bear
ta·ṭai, road runner
toah-kam, animal (alive, whole)
to·lo, bull, *toro*
to·va, turkey
tohtoni, ants
tohki'tuhṭ, spider
djuw, hare, jackrabbit
djuṭumi, bear
tcemama'ki, horned toad
*tcehe-kam, woodpecker
tcehwo, gopher; pl. tce'tcehwo
*tcivihtcuhte, killdeer
*tcuavi, fox
*tcuhtculi, hen
tcuhkuhṭ, owl
tcuku'kcevah', cricket
gaw, badger
*gehwo, wild cat
gohtci, wild boar, peccary
go'ks, dog
kaso, fox
kuriyu, horse, *caballo*
kakaihtcu, topknot quail
kisuhpi, small bird
ko'oi, snake, rattlesnake
komchktceṭ, turtle
kohson, wood rat
*kohkovah, ground owl
kokohṭ, geese, crane
kusṭa'k, ant
kulivitci-kam, a brown singing bird
*kuvi't, large yellow deer

BODY PARTS

192
826

a'an, feathers, wings
aht, anus, bottom
eli-ta'k, skin, bark
e'ehṭ, blood
ibe'ta'kx, heart, spirit
o, back
o'o, bones
o'o'kx, tears
um, thigh
*mahtx'k, palm of hand
*mahtcsvita'k, large feathers
mo'o, head, hair

10: Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

192
826

mo'oh-txk, scalp
mu·ha, vagina
*muh, wound
nahk, ear
nonha, egg
novi, hand
sih-se-vaṭa'k, saliva
sic, elbow
sihpuhṭ, rump, buttocks
coh-ca, nasal mucus
*coco'pah, wrist guard
hi'ı, urine
hiwehtcu, groin
hiwe-'tak, hiwo-'k, sore
hon, body
ho'ki, hide, buckskin
huhuli-ka, menstruation
hu·tci, finger or toenails
viha, penis
vi·hpe'to, testicles
viki, down
wohpo, body hair, fur
wo·hk, belly, abdomen
wui, eye
wuhvoh-cah, face
bahi, bai, tail
baco, breast, chest
bi't, excrement
da·hk, nose
ta·htami, teeth
tahtai, sinew
taht, foot
ton, knee
tcini, mouth
tcini-wo, beard
tcu·li, hip
tcu·hu'k, flesh, meat
kahvo, leg
*kai-cn'ki, crotch
ka·m, cheek
ke·tca, semen
koa, forehead
komi, back, shell
koc, nest
*kocova, skull
*kohki, footprint
kuhco, back of the neck

10:Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

192●
824

BOTANICAL TERMS

a·n, desert willow
i·sevi'k, species of cactus
ihu, gathered cactus fruit
ihu'k, devil's claw, *martynia*
iva'ki, weeds, greens
ibahi, ibai, leaf cactus, *tuna*
i·hkovi, a food plant
i·hkuli, a medicinal plant (*peyote?*)
ohpon, a food plant
u·mu'k, species of yucca
us, stick, tree
u'u'se-bavi, *alimana* (tree bean)
uhtko, stalk of soapweed
uhtko-tce·tci, soapweed
u'ṭeva'k, *tule*
mi·ranyu, milin, muskmelon
mu·ṇoi, beans
*muḍata'k, corntassel
nahw, nauv, leaf cactus
na·ka'k, species of cactus
lanṭcohki, lentil, *lenteja*
ṇa'i, underbrush, rubbish
ṇa·ṭ, wild potato
ṇekoi, greasewood
*ṇu'uvahṭx, *chia*
ha·li, ha·r, squash, pumpkin
haṇani, giant cactus, *sahuaro*
haha'k, leaves
ha't, a food plant
heṇi'k, flower
ho'i, thorn
*ho'iṭx-kam, *palo fierro*
hovi'tci, Spanish bayonet
hunxi, corn
hulikata'k, first stage of *mesquite* bean before blossoming
va'u'k, stalks, vines, chaff
vaṇi, grass, hay
vahpk, reeds, cane, cactus-ribs
viho'k, *mesquite* beans
viw, tobacco
vi·bam, milkweed (chewing gum)
bahidak, *sahuaro* fruit
bavi, white bean
*pawui, species of wild bean
pilihkani, pirkanyim, wheat
*pu·li, clover
tai'kah, sprouts of *sas* plant for basketry
tahpk, seeds of a small plant
tahtk, roots
tahkewei, tree *yucca*

10: Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

192 tohawes, species of brush
*tus, whole oak
824 *djiawul*, devil cactus, *biznaga*
tceolim, ɒjiorim, species of cactus, *choya*
tce·mi, species of cactus
tcuni, dried cactus fruit
tcuhtcuis, *pitahaya*
kaitc, seeds
kalieac, species of pea (*garbanzos?*)
*ka'kahtɒ, cut and burn brush to clear land
kehpi, watermelon
kisohki, species of cactus
koswul, berry brush
kohte'ṭohpi, *toloache*
*kokemahṭk, *palo verde*
ku'a'ki, wood
kuhi, kui, *mesquite*
ku'kia, kaitc'kah, seed corn

NATURAL PHENOMENA

192 ahki, river bed; *arroyo*
e'ehs, anything planted
oyit, oit, farm
o'ohṭ, sand
on, salt
o·la, gold, *oro*
uca'pi, pitch
mai, food cooked in ground
maca't, moon, month
mahtai, ashes
lanicu, *rancho*
*sehpi-djehṭɒ-kam, winter
sevа'ahaike, dew
siwuli'k, whirlwind
*cacka'tci, morning mirage
ca·gi'k, cañon, gulch
cu·da'ki, water
heweli, wind
heht, red paint
hi'kuc'pi, mist
ho'dai, stone, rock
hu'u, star
hutení'ke, evening, sunset
vainomi, iron, metal
va'i'ki, water in a jar
va·muli, marsh
vahya, well
vaw, solid rock
*vahkola, water-gathered rubbish
va'ṭa'k, juice
*vahteiki, artificial pond
va'k, hole
*vi·o'ohya'k, fine sand

10:Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

192●

wo'o, natural pond
*wo'ocani, valley
wo·'k, road, trail
*wehpe'ki, lightning
we'ki, red pottery paint
bi, food in a dish
bi't, mud, clay, dirt
palomo, lead, *plombo*
tai, fire
tac, sun, day
tohono, desert
to·nehk, hill
to'a'k, mountain
djuhki, rain
toeho, cave
toeva'ki, clouds
toewehṭ, earth, land, dirt, soil, world
toe'k, prairie, hole, opening
tcuhu'k, night, darkness
tcuṭa'ki, charcoal, coals
giohohṭ, rainbow
*kahtcim, ocean
kev, snow, ice
*komaiwua'k, fog
kowohṭk, hollow
*kohkohteki, shells
ku·ps, smoke, dust
ku'ku'tcuihki, mirage, heat-waves
*kutcki, firebrand
ku'ki, a rumbling noise

ARTIFACTS AND MANUFACTURES

ahtoli, *atole*
ahtoca, loin cloth
anyi'ka, clothes, property
et'pa, grass door
i·na'ki, ancient skirt
i·vi'tah-kuhṭ, fire drill
ihpuhṭ, modern skirt
*o'ohana, painting
ola, women's double ball
ovi'tci, awl
u'u, war arrow
u'u-mhaṭa'k, arrow feathers
u·c, arrow point, insect's sting
u'kuca, windbreak
mayin, main, woven mat
*maihkuhṭ, earth oven no longer in use
manata'k, hobbling-rope
manteskki, lard, *manteca*
mahtcuhṭ, grindstone, *metate*
mahkoṭa'k, coupling implement
mihtpia, cinch stirrup

10: Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

●192 navai't, *sahuaro* wine
ne'ih-kuhṭ, singing-ground
liali, money, *reales*
li·ahi, lariat, *reata*
lomiaṭa'k, grass saddle
*sisedoih-kuhṭ, sticks for toasting corn
si·wo'ta, feather tassels
sihtoli, syrup
ca'ali'ki, brace for carrying-basket
ca·livi, trousers
cavih-kuhṭ, rattle
ca·hkim, nose halter
celina, straight stick for arrow
coni'kiwuli, racing-ball
contcki, war-club
co'piahṭ, doll
cu·ck, shoes
ha'a, jar, *olla*
ha'u, gourd cup, *jicara*
hace'ṭa, woven basket
hahpoht, arrow
ha'ko, cushion for head load
hewosi, decoration
hihi'ani, cemetery
hinevali, grass mat
hi'totah-kuhṭ, cooking-jar
hi'toht, cooked food
hoa, sewed basket
hoasa'a, plate, dish, saucer
ho'oma, best shooting arrow
hua-comi, buckskin sack
*va'ahki, house
va'i'k-kuhṭ, water jar
va·'o, cactus-tongs
vaca, basket with cover
vacomi, storage basket
vawenaṭa'k, ridgepole
vahtciho, large wooden dish
vahko, water jar, canteen
vahkus, mat, carpet, blanket
vinoi, mescal, *vino*
vite'-kuhṭ, pestle for grinding
vi'tcina, twisted rope
weuh-kuhṭ, sling
wegita, bull roarer
wonami, hat
*wosun·ah-kuhṭ, broom, sweeper
woca'k, pocket, *bolsillo*
wo·ht, foreshaft of arrow
wo'kca, quiver
wuliwe'ka, grass bundle target
*wu·lih-kuhṭ, cradle
bayohka, bayuhka, necklace, beads
*pilisa, blanket

10:Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

192●

pocolí, posole, hominy
*daih-kuhṭ, chair
talivin, rope-twister
tceoh-kuhṭ, cane
*tcemait, bread
djenyih-kuhṭ, smoking-place, cigarette stub
*tcehtcemaihtah-kuhṭ, griddle, *comal*
tcehpa, mortar
tce·pite-kuhṭ, pestle for pounding
tceh'to, fireplace-stone
tcehtoneṭa'k, center pole of house
tce·'k, mesquite-bean flour
tce'ke'ṭa, race track
*tcehtcakoceta'h, ankle rattles
tcuakia, saddle-net
tcu'i, flour
ga·ht, bow
kaikia, sandal string
kalicani, trousers, drawers, *calzones*
ki·, house, home
ki'aṭa'k, handle
ki·co, cheese, *queso*
*kicumehk, knitted handle
kiho, carrying basket
ki·wuhṭ, belt
ki·dje'k, door
ki'k, tallow
ki·hki, plow
kolasi, *corral*
kohtoni, shirt, *camisa*
kulani, medicine (*curar*)
ku·kata, hanging shelf

PERSONAL CATEGORIES

a·mo, boss, master, *amo*
ali, baby, little one
ahpahp, name of clan
ahpaki, name of clan
ateu-a-kam, thief
imi'k, relation
o'o'tam, person, people, natives
o·vi, opponent
o'k, father
o'goli, name of clan
o·'p, tribal name
ohka, old woman
ohkami, father's elder sister
ua-a'gah-kam, judge
uvi, woman, female
wa'i, niece, nephew
waam, name of clan
wahṭ, child of woman
ateu-wa·htci, shaman, wise man

10: Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

192 ma·hkai, shaman, medicine man
mo'o'-betam, hunter
mo·a, daughter's child (woman speaking)
mu·hki, corpse, death
*mu:nuhku'tam, invalid
navi'tcu, clown at ceremony
nawo'tci, friend
*nye'ohki'-ka'ke'ṭa-tam, interpreter
neboli, slave
si·s, elder brother, elder sister
sulitci, baby boy
cehpitci, younger brother or sister
contali, soldiers, *soldados*
ha'djuni, relations
ha'kimahṭ, nephew or niece
ha'kimatce'n, sister-in-law
*ha'kiht, father's younger brother
hema'tekam, people
he'k, co-wife
ho'ohk, semi-human monster
honi'k, wife
hu'uli, maternal grandmother
va·vi, name of clan
viahpo'o'ge'eli, young man
vicahṭ, great-grandparents
vihpia-me'dam, hunter
vihpiohp, young-men, boys
vikoli, great-grandchild
wemeh-kam, companion, partner
wemeh-kali, leader in relationship
wena'k, assistant
*wowoiht, father's younger sister
wose-mahṭ, son's child (man speaking)
wosk, paternal grandfather
ba'a-mahṭ, daughter's child (man speaking)
ba'a-me'ḍ-o'k, father-in-law
ba·'p, maternal grandfather
pima, Pima
da't, mother's elder sister
tahtali, mother's younger brother
topetam, one who calls hunters or racers
dje', mother
*dje'es, mother's elder brother
djisk, mother's younger sister
djiawuli, devil, *diablo*
djioc, God, *Dios*
dju'djih-kam, Mexicans
tceo'te, man
tcehya, girl
tcehpa'ahvi, wanderer
*stcu-tcehtce'gia'de'-kam, great warrior
ge'e, adult, elder
ge'e'dji'k, chief

10:Dolores I-5 (1911-1919) 1923
NU28 Papago NU28

192●

ge·li, old man, father's elder brother
gowenale, governor, *gobernador*
ka'a-maht, son's child (woman speaking)
ka·k, paternal grandmother
kihe, brother- or sister-in-law
kitahyo-kam, war-party
kohkoi, ghosts
kun, husband

ABSTRACT TERMS

ahhita'k, year
abam-tak, luck
*eli'ta, plan, guess
ebenyi, fear
eda, interior, center
ehkata'k, shadow
*ish'to'ki, a lie
ibe'ta'k, spirit, heart
ma·s, appearance, sight, light, color
matci'k, knowledge
*mumehkita'k, sickness
ne'i, song
si'ali, east, dawn, morning
sihkoli, circle
co'i'ge'ta'k, poverty
son, bottom, beginning, trunk
hime'ta'k, ways, actions, life
hu'k, ends
hu'ki'tei, edge, side, shore, bank
*vaka, mixture, dough
vahkoliwe, south
*vi'ihkam, remnant
weho-kam, truth
*woki'ta, fate
wuaka, girl's puberty ceremony
*wuyihkam, fate
pihu'ki'k, hunger
tonali'k, light
tenome'ta'k, thirst
tculi, corner
toupin, north
*tcuhhu'u'tculi, zigzag
toe'kia'ta'k, war, battles
tee'teki, dream
gewehka'ta'k, strength
*giwulihk, bend
*kaitam, sound
*kaitcim, saying
kewekohkik, tiresomeness
s-kakato, beauty
kita'k, life, living
s-ko'ohk, pain
kosi'k, sleep
hohsi'tah-kuht, sleep-producer

[p. 32 is blank]

759 179 knowledge, is their heritage from the past, when American Indians developed their own methods of medical treatment quite independently of Europeans. It is their heritage from the past when Europeans expected--and still expect-- Indians to accept European treatments which are very different from their own without being offered sufficient explanation. The Desert People simply do not know [192] many of our European medical concepts--there are not words in the Papago language for many of our common medical terms. So the Desert People can't even think about them, much less understand them.

660 This briefly states the basic situation which makes it quite certain that real improvement in Papago health not only among farm workers but throughout the whole tribal population awaits an intensive and effective health education program. Techniques for such education are known. The health of the Desert People will improve as those techniques are used.

Health education of school children could of course ultimately solve the difficulty. But ultimately may be a very long time, considering the proportion of Papago children attending school, their attendance records, and the number of years they don't go to school.

An intelligently managed program of sub-professional medical training could pay off in lives and better general health much sooner--soon enough to help the Desert People living in labor camps. It would require nothing more than brief training of medicine men in basic hygenic concepts and practices to effect great improvement.[1]

If medicine men could be taught recognition and treatment of a few basic ills by Indian Bureau doctors, chances are good the better feeling engendered could be used to persuade them to refer to white doctors cases they recognize as beyond their capabilities. The net effect could hardly escape being good, for any measure which gives the Desert People more knowledge of our concepts of disease and its treatment is a step toward better health for them. As long as their primary health problem is lack of knowledge, native medical practitioners are the natural and most efficient avenue for sending them additional knowledge and safety.

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[1]Arguments for such a program and estimates of its effect are presented in Dobyns, et al, 1949, p. 44-48. [i.e. as how to protect their health--Analyst]